May 17, 1887.

Prof. W. H. Flower, LL.D., F.R.S., President, in the Chair.

The President read some extracts from a letter which he had received from Dr. Emin Pasha, dated Wadelai, Nov. 8, 1886.

Dr. Emin stated that he was forwarding along with the letter some objects of Natural History procured in Monbottu, amongst which were the skull of an old male Chimpanzee, killed by his party on the 13th of July, some skulls and bones of natives of the Akka tribe, together with some boxes of mammals' skins, birds' skins, and butterflies.

Mr. A. Thomson exhibited specimens of Papilio porthaon (Hewitson, Exotic Butterflies, vol. iii. Papilio, nos. 21 & 22) reared in the Society's Insect-house, together with the empty pupacases. Eighteen specimens of the pupa of this fine insect had been deposited in the Insect-house by Mrs. J. Monteiro in September last, having been brought home by her on her return from Delagoa Bay. Out of these 2 had died, and 3 emerged in October last. The remaining 13 remained in the pupa stage all through the winter, and had emerged at various dates, from the 19th of April of this year till this day (May 17th).

Prof. G. B. Howes, F.Z.S., exhibited and made remarks upon an original drawing of the head of a Palinurus (P. penicillatus; Mauritius), originally described by M. Alphonse Milue-Edwards 1, F.M.Z.S. Having recently had occasion to correspond with M. Milne-Edwards concerning the same, that gentleman, with great courtesy, had sent the sketch especially made in reply. As the interest of the case was very great and as the original paper had been published without illustration, he thought it desirable to bring the drawing before the notice of the Society 2.

The chief interest of the specimen lay in the fact that the left ophthalmite had taken on antenniform characters, this being the only Crustacean yet recorded in which that had been observed. Prof. Howes stated the facts of the case, and recapitulated the leading arguments for and against the supposition that the ophthalmite is the homologue of an appendage, and its supporting skeleton that of a somite. He wished especially to draw attention to one feature which it appeared to him M. Milne-Edwards had not noted. It was well known that the cornea of the decapod crustacean eye does not, in many instances, surmount the entire free end of the eye-stalk; a portion of the latter (generally the outer free border) is often destitute of corneal facets, and frequently swollen and well differentiated. Comparison with the drawing which he had the honour to exhibit, and which he had ascertained was a faithful representation of fact, showed that the filiform appendage was derived from a similar non-

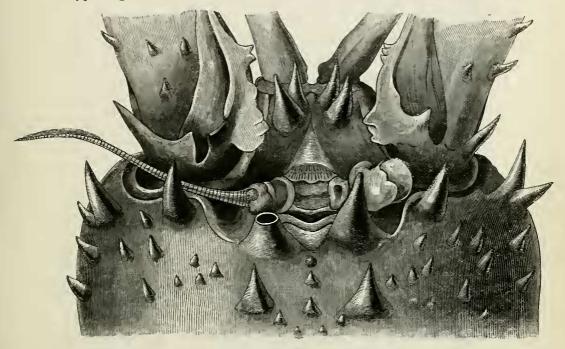
¹ Compt. Rendus, vol. lix. (1864).

² The Society is indebted to the generosity of M. Milne-Edwards for permission to reproduce the same.

faceted inner free border, and that it had all the characters and

relations of an endopodite.

If this were so, and if the homology between a typical appendage and the eye-stalk was accepted, the eye-bearing (corneal) portion was clearly exopoditic in position, and it became a question as to how far it might, or might not, represent that segment of the typical appendage 1.



Cephalon of Palinurus penicillatus, bearing an antenniform ophthalmite.

Prof. Howes held that the only logical conclusion which could be drawn from the study of the specimen was that it supported what M. Milne-Edwards tersely calls, "les vues théoretiques relatives à la similitude fondamentale des parties susceptibles de revêtir des caractères différentes".

The only reference to this specimen made by subsequent writers was one by Rolleston in his remarkable work 'Forms of Animal Life.' Dealing with the eyes of Crustacea, Prof. Rolleston had cited it as an example "of the occasional replacement of their facets by a flagellum such as the antennæ carry." This, Prof. Howes had ascertained from M. Milne-Edwards, was a misinterpretation of the original description, the cornea and flagellum being, in reality, discontinuous.

² The 'Challenger' Reports have recently brought to light the following. Sars has shown that, among the Schizopods, highly organized luminous organs appear (ex. Euphasia) at the bases of certain appendages and elsewhere; concerning those of the appendages, it is significant to find that they are borne upon the eye-stalks in addition to the true visual organs, and that in a position identical with those of the post-oral series. Beddard records in the Isopods Arcturus, Astrurus, and Munna a condition essentially intermediate between the typically Edriophthalmous and Podophthalmous types.—G. B. H.

Prof. Howes then pointed to the interesting fact that the ophthalmite had assumed more nearly the characters of the antenna than those of the more modified antennule, and concluded by saying that while in his opinion the specimen did not finally settle the morphology of the eye-stalk, he had nevertheless brought the drawing forward in the hope that study of it might curb the eagerness with which, in our craving for novelty, we were sometimes too ready to reject the older interpretation.

A paper was read by Mr. W. F. Kirby, F.E.S., entitled "A Revision of the Subfamily Libellulinæ, with descriptions of new

Genera and Species."

Mr. Kirby stated that the last compendium of this group had been published by Dr. Brauer in 1868, in which 40 genera were admitted. This number was now raised to 88. All of these were fully characterized in the present paper, in which 52 new species were also described. Mr. Kirby likewise gave a short sketch of the characters of the *Libellulinæ*, and especially of the neuration of this group, which he considered to be of primary importance.

This paper will be published entire in the Society's 'Trans-

actions.'

The following papers were read:-

1. Notes on Specimens in the Hume Collection of Birds.

—No. 5*. On Syrnium maingayi. By R. Bowdler Sharpe, F.Z.S.

[Received April 15, 1887.]

This is a perfectly good species, and was described by Mr. Hume in the sixth volume of 'Stray Feathers' (p. 27). At the time of writing the 'Catalogue of Birds' I had seen but one specimen, collected by Dr. Maingay, in Lord Tweeddale's Museum, and I came to the conclusion that it was not to be separated from Syrnium indrani of Southern India and Ceylon. Since the advent of the Hume Collection to the British Museum, with its increased series of these Wood-Owls, I have come to the conclusion that the Malaccan species is distinct, and in fact that it is the best characterized of any of the Bulaca group.

1. SYRNIUM MAINGAYI.

Syrnium indrani, pt., Sharpe, Cat. B. ii. p. 282. Syrnium maingayi, Hume, Str. F. vi. p. 27 (1878); id. Str. F. 1879, p. 46.

Adult (type of species). General colour above warm chocolate-brown, more or less distinctly barred across with rufous-buff cross markings, predominating on the hind neck and forming a tolerably

¹ For No. 4, see P. Z. S. 1886, p. 354.